



FEATURES:

- Step Down DC/DC LED driver
- Constant current output
- Ultra Wide (7:1) input voltage range
- High efficiency up to 97%
- IP67 Case
- Operating Temperature range -40°C to +85°C
- Open and Short LED Protection
- PWM / Digital Voltage dimming
- Output power up to 56 Watts



Models Single output

Model	Input Voltage (V)	Output Voltage (V)	Maximum Rated Current (mA)	Max Capacitive Load (uF)	Efficiency (%)	Ripple & Noise (mV p-p)
AMLDW-6030-RZ	9-60	2-56	300	2.2	97	250
AMLDW-6035-RZ	9-60	2-56	350	2.2	97	300
AMLDW-6050-RZ	9-60	2-56	500	2.2	97	350
AMLDW-6060-RZ	9-60	2-56	600	2.2	97	400
AMLDW-6070-RZ	9-60	2-56	700	2.2	97	400
AMLDW-60100-RZ	9-60	2-56	1000	2.2	97	450

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	48	9-60		VDC
Filter	Capacitor			
Absolute Maximum Rating			65	VDC
Peak Input Voltage time			500	ms
DC/DC ON (Leave open if not used)		ON –Open or 2.5V< Vadj <5V		
DC/DC OFF (or short pins 2,3,4)		OFF(shutdown) – Vadj <0.8		
Maximum Remote pin drive current	Vadj = 0 - 5V		<1	mA
Quiescent Current in Shutdown mode	Vin = 60V		3	mA
On/Off Control (Digital Control)		Max PWM Frequency 1KHz		
Output current adjustment		1 to 100		%

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Current accuracy		±5		%
Output Voltage range	V input = 60V	2-56		VDC
Output current	Vin – Vout > 4V			
Short Circuit protection	Regulated at the rated current for each model			
Temperature coefficient		±0.03		%/°C

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	40-1000		KHz
Operating temperature	See derating chart		-40 to +85	°C
Storage temperature		-40 to +125		°C
Maximum case temperature			105	°C
Thermal Impedance	Free air convection	+30		°C/W
Cooling	Free air convection			
Humidity			95	% RH
Case material	Non-Conductive Black Plastic (UL94V-0 rated)			
Weight		22		g
Dimensions (L x W x H)	1.25 x 0.80 x 0.49 inches	31.75 x 20.32 x 12.45 mm		
MTBF		> 2 000 000hrs (MIL-HDBK-217 F at +25 °C)		
Maximum Soldering Temperature	1.5 mm from case for 10sec.		260	°C

NOTES:

1. Reversed polarity at the input power will damage the driver. The input ground must not be connected to the negative output.
2. Maximum output open voltage is equal to input voltage.

Safety Specifications

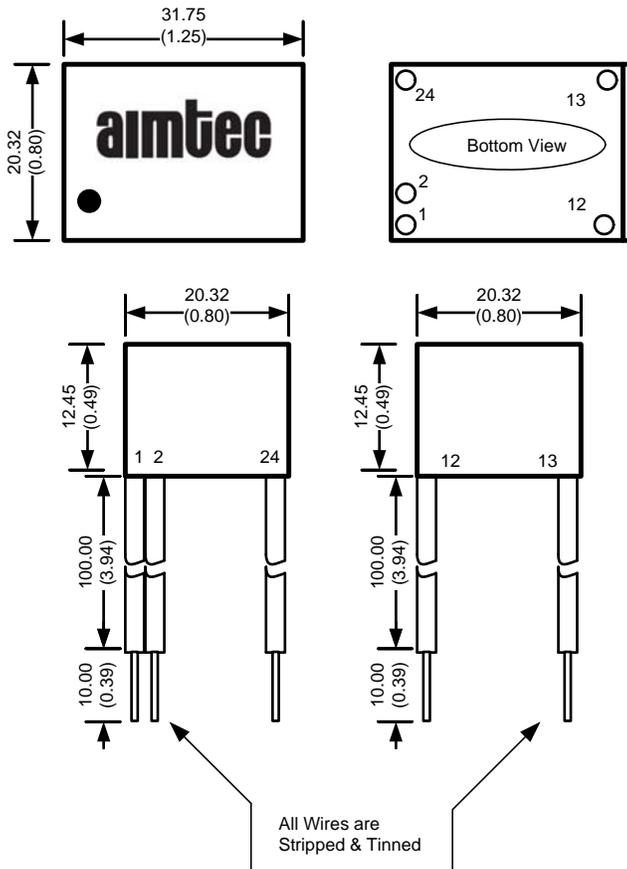
Parameters

Standards	CE
	EN 55015 : 2006+A1 : 2007+A2 : 2009
	EN 61547 : 2009
	(Designed to meet EN 60950-1)

Pin Out Specifications

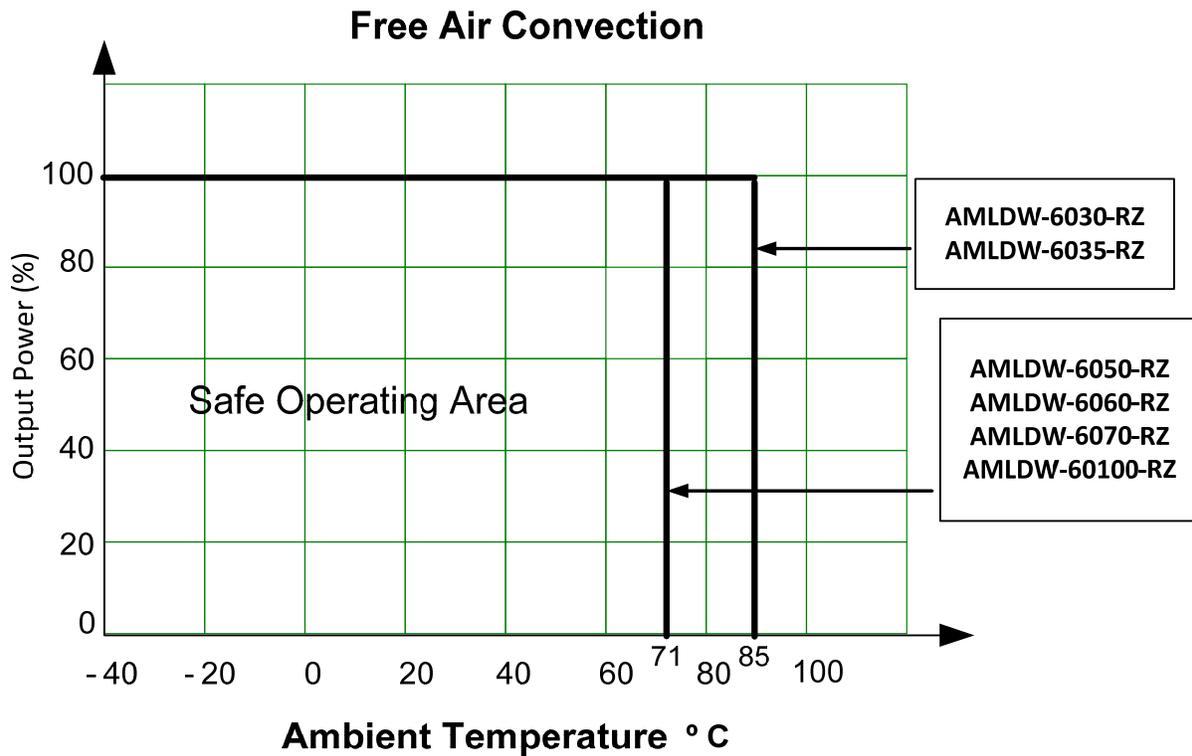
Pin	Single	Description
1(Black)	- V Input	- DC Supply
2(White)	Vadj	PWM/ON/OFF or not used
12(Blue)	-V Output	LED Cathode Connection
13(Yellow)	+ V Output	LED Anode connection
24 (Red)	+ V Input	+ DC Supply

Dimensions

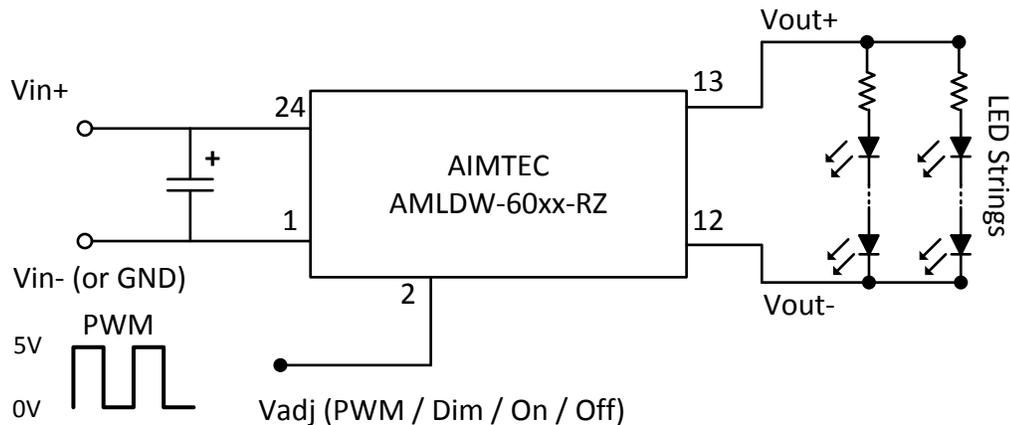


Lead Wires are under the specifications of general lamps
Wire is UL 1015/CSATEM listed #22AWG / 600V / 105°C

Derating



Typical Application Circuits



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